



# The Jefferson Corridor

AN INDUSTRIAL AND ECONOMIC DEVELOPMENT PROJECT  
IN JEFFERSON COUNTY, ARKANSAS

## FY 2020 BUILD Transportation Discretionary Grants Program

Submitted by: Jefferson County, Arkansas

Total Projected Cost: \$19.78 Million

BUILD Grant Funds Requested: \$14.78 Million



The Honorable Elaine Chao  
Department of Transportation  
1200 New Jersey Ave. SE  
Washington, DC 20590

Dear Secretary Chao,<sup>1</sup>

This letter comes with a renewed hope and excitement for the citizens of Jefferson County, Arkansas. This area, once crowded with businesses, restaurants, shops, entertainment venues, and hotels, is working to make a comeback. Pine Bluff, the county seat and largest city, once held the distinction of being the trading center for all southwest Arkansas residents. Unfortunately, now a majority of downtown area businesses in Pine Bluff and throughout Jefferson County are closed. Jefferson County, once a bustling center of trade, has so much potential and we are determined to revive our economy.

Jefferson County is home to the U.S. Army's Pine Bluff Arsenal, built on 14,944 acres to design and manufacture defense items, serve as a technology center for infrared munitions, provide first-responder equipment, training and handle surveillance of pre-positioned equipment for Homeland Security and to the Food and Drug Administration (FDA) National Toxicological Research Center, a one-million square foot research campus that is the only FDA center located outside Washington, D.C. Jefferson County roads that serve these facilities are in poor condition and were not designed or constructed to handle the industrial traffic that frequents this area. The links to these facilities are:

U.S. Army, Pine Bluff Arsenal  
<http://www.militarybases.us/army/pine-bluff-arsenal/>

FDA, National Center for Toxicological Research  
<http://www.fda.gov/NCTR>

Because of our close proximity to the Arkansas River, access to the rail and interstate highway, we have unique opportunities to attract industry. The Jefferson Corridor Project proposes roadways to handle the heavy traffic and industrial load from I-530 across Hwy 365 to an industrial area that is home to the largest employers in Jefferson County. The award of this grant would make it possible for our county to provide improved roadways for our largest employers, accommodate an exciting industrial development project, [GTL Americas LP](#), that is planned with an approximate \$4 billion investment, and attract other future projects to this area that has been designated as a Qualified Opportunity Zone.

Secretary Chao, we look forward to the day I-530 will be extended to join the I-69 Superhighway. For the immediate future, the proposed roadway will help us protect and grow the jobs we have in the industrial area now and expedite the construction phase of the gas-to-liquids facility, [GTL Americas LP](#), that is already fully permitted, has design engineering underway and is moving toward a construction start-up phase. The construction period will provide 2,500 jobs for three years, and then 250 full-time jobs in the first phase of a planned five-phase project. We are excited about the possibility of you finding favor with our plans. We have briefed and are grateful for the support of our congressional delegation, Senator John Boozman, Senator Tom Cotton, and Congressman Bruce Westerman on industrial development projects, including the gas-to-liquids mega-project, being planned for Jefferson County.

Sincerely,  
Gerald Robinson, County Judge  
Jefferson County, Arkansas

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<sup>1</sup> A signed copy of this letter is available in the letters of support section, **Appendix A**, on the project website

## Table of Contents

<b>Key Project Information</b> .....	<b>2</b>
<b>Contact Information</b> .....	<b>2</b>
<b>Project Description</b> .....	<b>1</b>
<b>Transportation Challenge &amp; Potential Solution</b> .....	<b>3</b>
<b>Project Location</b> .....	<b>6</b>
Qualified Opportunity Zone .....	8
<b>Sources and Uses of Funds</b> .....	<b>9</b>
Uses of Funds .....	9
Source of Funding .....	10
<b>Primary Selection Criteria</b> .....	<b>11</b>
Safety .....	11
State of Good Repair .....	13
Economic Competitiveness .....	14
Environmental Sustainability .....	15
Quality of Life .....	16
<b>Secondary Selection Criteria</b> .....	<b>16</b>
Jefferson County- GTLA Partnership .....	16
<b>Environmental Risk</b> .....	<b>17</b>
The Environmental risk on this project is low. ....	17
Project Schedule .....	18
<b>Benefit Cost Analysis</b> .....	<b>19</b>
<b>Index of Supporting Information on Website</b> .....	<b>20</b>

## Table of Figures

<b>Figure 1: A Map of the Jefferson Corridor Project Industrial Area</b> .....	<b>2</b>
<b>Figure 2: Project Location Maps</b> .....	<b>5</b>
<b>Figure 3: Rendering of the Jefferson Corridor Project’s Proposed Roadway</b> .....	<b>6</b>
<b>Figure 4: Stagecoach Road</b> .....	<b>7</b>
<b>Figure 5: Chandler Road</b> .....	<b>7</b>
<b>Figure 6: Opportunity Zones</b> .....	<b>8</b>
<b>Figure 7: Diamond Interchange</b> .....	<b>8</b>
<b>Figure 8: Stagecoach Road</b> .....	<b>11</b>
<b>Figure 9: Stagecoach 200 Block</b> .....	<b>12</b>

<b>Figure 10: Stagecoach and Hwy 365 .....</b>	<b>12</b>
<b>Figure 11: Sheridan Road Businesses .....</b>	<b>13</b>
<b>Figure 12: Sheridan Road Route.....</b>	<b>16</b>

## Table of Tables

Table 1: Weight of Freight on Corridor Connectors .....	5
Table 2: Use of Funds .....	9
Table 3: Economic Impact Pine Bluff MSA.....	14
Table 4: Economic Impact Arkansas .....	15

## Key Project Information

Project Type: Public Roadway  
 Project Location: Jefferson County, Arkansas  
 Urban/Rural Area: Rural  
 Lane Miles of Routes: Approximately six (6) miles  
 Project Website: <https://www.jeffersoncountyar.gov/JeffersonCorridor>  
 BUILD FY2020 Funds Requested  
 BUILD FY 2020 Funds Obligation Date: April 2021  
 Construction Start: July 2021  
 Project Completion Date: August 2022 (Construction)

## Contact Information

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## Project Description

Jefferson County, Arkansas is situated in a region of Arkansas known as the Delta. The Delta region's western border follows the Arkansas River just outside Little Rock down through Pine Bluff in Jefferson County. The project site is located in a Qualified Opportunity Zone under the Tax Cut & Jobs Act of 2017. Jefferson County is included in the Pine Bluff, Arkansas Metropolitan Statistical Area (MSA), a tri-county MSA also including Cleveland and Lincoln Counties.

As of the 2010 census, the population of the county was 77,435 with a majority African American population. There has been a decline in population in each census following the 1980 census and at times, in recent history, Jefferson County has been named among the most economically depressed counties in the U.S. The most significant decline in population to date, 13.7%, is estimated for the current census. The residents and leadership in Jefferson County are at a crossroads, perhaps on the edge of a precipice leading to economic revival or the continuance an economic slump. Easy access to rail, the navigable Arkansas River and an interstate highway make our sparsely populated industrial area ideal for large industrial projects.

Jefferson County has all the ingredients to see better days again. In the late 1800s, when cotton was king, the local economy was driven by cotton. The rich soil of the Delta made cotton cultivation highly productive. In 1886, Jefferson County produced the most cotton in Arkansas and the second-most throughout the South. Easy access to river transport provided an important transportation and shipping advantage over the state's other cotton farmers. The county's river port was one of the first of many close ties to transportation that have been vital to local economic development.

Rail and river commerce drew industry and residents to Jefferson County and by 1890, Pine Bluff was the state's third-largest city. Throughout the 1880s and 1890s, the timber industry also fueled economic development and once again transportation assets were key. In the early 1900s growth and development continued and in 1914, Dollarway Road in Pine Bluff was completed and recognized as the longest continuous stretch of concrete road in the United States. In the 1920s and early 1930s, the state's highway construction program was critical to Jefferson County to facilitate trade with communities in other Arkansas counties. An airport was built in the mid-1940s as state and US highways continued to expand. The importance of the Arkansas River access in Jefferson County re-emerged in the late 1960s with the development of the McClellan-Kerr Arkansas River Navigation System. All four modes of transportation – river, rail, road and air -- remain vitally important to the local economy today.

The Jefferson Corridor Project is proposed to improve access to an important industrial area east of U.S. Interstate (I-530) for existing and future industrial development. The improved roads would provide a safer and more efficient ingress and egress of the industrial area for both personal and industrial vehicles by upgrading the connections between I-530, at exits 24 and 27, and Hwy 365 and provide safe passage for heavy traffic.

The project is of vital importance to Jefferson County. Some of the county's largest employers, the U.S. Army's Pine Bluff Arsenal, a manufacturing complex that provides U.S. and Allied

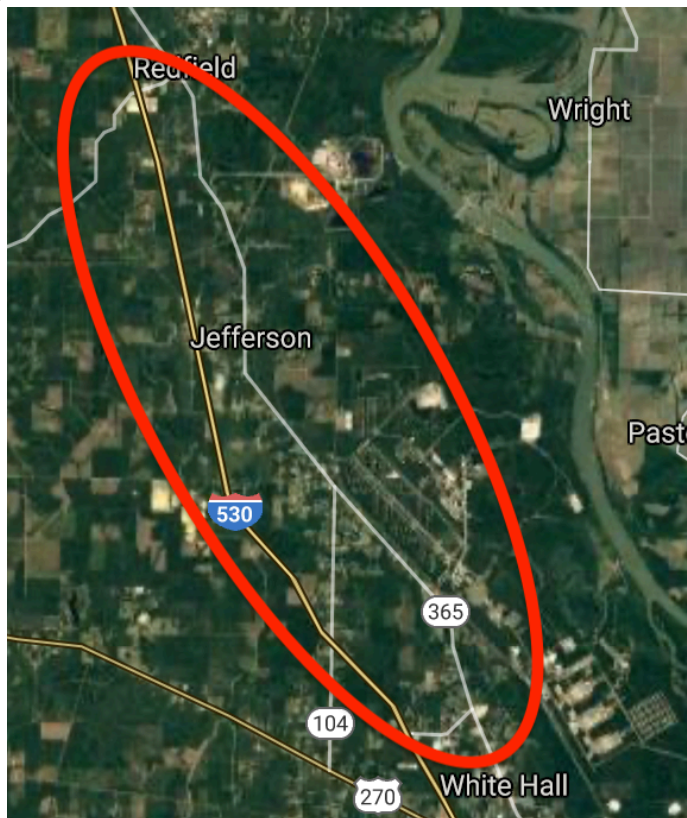
forces with critical products and services unavailable from other sources; the Food and Drug Administration (FDA) National Center for Toxicological Research (NCTR), which plays a vital role in protecting public health; the White Bluff power plant; and Tyson Foods are located in this area east of I-530. Importantly, the project would also support the proposed development of a world-class gas-to-liquids (GTL) project that would represent a \$3.5 billion-dollar investment in Jefferson County. An 1,800-acre site has been identified for the GTL and associated projects adjacent to the FDA NCTR Campus.

In Arkansas, I-530 is a spur route of the U.S. interstate highway system that spans 46.65 miles from Pine Bluff, Arkansas north-northwest through the cities of Redfield and White Hall to Little Rock, Arkansas at an interchange of I-30/I-440/US 65/US 67/US 167. The U.S. Department of Transportation (DOT) proposed extension of I-530 from Pine Bluff south to Monticello as a connector between Interstate 30 and Interstate 69 as part of High Priority Corridor 18: NAFTA Superhighway (Section (18)(C)(ii)). The Jefferson Corridor Project would tie Jefferson County's industry and public facilities directly into the future Superhighway, resulting in safe, efficient, and reliable transportation to a major transportation network.

Redfield is a small municipality in northwestern Jefferson County that is also in the Pine Bluff MSA. Redfield is situated on the Union Pacific (UP) Railway and is approximately 24 miles south of Little Rock, the state's capital city. As of the 2010 census, the Redfield population is 1,297.

White Hall is a city in Jefferson County with a population of 5,526 in the 2010 census. It is located within the Pine Bluff MSA and the Greater Little Rock-North Little Rock-Pine Bluff Combined Statistical Area (CSA). The city is home to the Pine Bluff Arsenal.

The more specific site of the proposed Jefferson Corridor Project is the community of Jefferson, also known as Jefferson Springs, an unincorporated community in Jefferson County, Arkansas located between Redfield and White Hall. Jefferson Springs is situated on the Union Pacific Railway (UP), 15.5 miles northwest of Pine Bluff. Jefferson Springs is home to the FDA National Center for Toxicological Research.



*Figure 1: A Map of the Jefferson Corridor Project Industrial Area*

## Transportation Challenge & Potential Solution

Within Jefferson County, an area of economic and industrial development extends to the north of Pine Bluff. This area is bounded on the east by the Arkansas River and on the west by State Highway 365. The industrial area located here (See Figure 1, above) is home to some of Jefferson County's largest employers. Among these are the U.S. Army's Pine Bluff Arsenal, the FDA National Center for Toxicological Research (NCTR), Tyson Foods, and the White Bluff power plant. The major interstate highway servicing the area is I-530 which is west of the State Highway 365. It is also the site of the Jefferson Springs Industrial Park, a planned development, located to the north of the Pine Bluff Arsenal near the NCTR. The Jefferson Springs Industrial Park's first tenant will be GTL Americas, a gas-to-liquids project currently in the engineering design phase.

The challenge is in handling industrial traffic that is currently forced to take circuitous routes to the industries east of I-530 and Hwy 365 to avoid the poor condition of roads not designed for industrial traffic. Traffic between I-530 and the industrial area is via county roads that are inadequate to handle the current traffic load much less the estimated approximate 4,000 average daily traffic count coming during the construction of phase I of the GTL Americas gas-to-liquids project, which is in the engineering design phase now. County roads are maintained by Jefferson County; however, the original design and construction of these roads contemplated use solely by personal vehicles. Jefferson County is unable to increase productivity and competitiveness for the workers and businesses in the area without the roadway improvements proposed in the Jefferson Corridor Project. Freight is often re-routed to access the industrial area in an inefficient manner from points to the north and south rather than the more direct route because of safety concerns and poor road conditions.

The potential solution proposed in the Jefferson Corridor Project is to provide safety and efficiency for the personal and industrial vehicles exiting and entering I-530 and traveling to and from the industrial area to the east. A safe, modern, efficient roadway, in place of the county roads, to the industrial area east of I-530 is badly needed. The Jefferson Corridor Project is a proposal to allow Jefferson County to accommodate the current traffic load on roadways from I-530 to the industrial area to the east. The Corridor Project is also needed to attract future industrial development and prepare for the planned gas-to-liquids project that has acquired both air and water permits from the Arkansas Department of Environmental Quality, is undergoing design engineering and moving toward a construction phase.

Between Redfield and White Hall on I-530 there are four possible connections to the industrial area:

- Exit 20 on I-530, Sheridan Road
  - Average Daily Traffic (ADT) count: 4600
  - Daily Equivalent Single Axle Loads (ESALs): 281
  - Somewhat north of the higher density area
  - There have been complaints that this route is used by heavy truck traffic.

- The Sheridan Road route is used as a primary connector due to the poor route quality of other connectors in the area. Despite a relatively better roadway quality this route still presents major safety concerns as it cuts directly through the middle of Redfield.
- This route ESAL is already high for a rural two-lane road. It is assumed that much of the truck traffic is headed to FDA National Center for Toxicological Research and has re-routed from Stagecoach because of its poor condition.
- Exit 24 on I-530, Stagecoach Road
  - ADT Count: 1200
  - Daily ESALs: 44
  - Currently a primary connection and handles traffic from all of the high-density activities that are east of I-530 and Hwy 365, accessing I-530 including the National Center for Toxicological Research.
  - Poor route quality and poor road condition.
  - Low Daily ESAL when compared to traffic count, likely because of poor quality and road condition.
- Exit 27 on I-530, Gravel Pit Road
  - ADT count: 720
  - Daily ESALs: 45
  - A primary traffic route that handles traffic for the U.S. Army's Pine Bluff Arsenal.
  - Poor route quality and poor road condition.
  - Low traffic count and Daily ESAL
- Exit 30 on I-530, Hwy 104
  - ADT count: 2000
  - Daily ESALs: 129
  - This access is south of the industrial area; however, it appears to handle a significant portion of traffic for the U.S. Army's Pine Bluff Arsenal.
  - This is a congested route, especially with truck traffic, even though it is not an efficient route into the arsenal. The route quality is good and there are no turns.

### **Weight of Freight Movement on Corridor Connectors\***

#### **Exit 20 on I-530, Sheridan Road**

- Daily ESALS = 281
- Annual ESALS = 102,565

#### **Exit 24 on I-530, Stagecoach Rd**

- Daily ESALS = 44
- Annual ESALS = 16,060

#### **Exit 27 on I-530, Gravel Pit Road**

- Daily ESALS = 45
- Annual ESALS = 16,425

#### **Exit 30 on I-530, Hwy 104**

- Daily ESALS = 129
- Annual ESALS = 47,085

\*Arkansas Department of Transportation

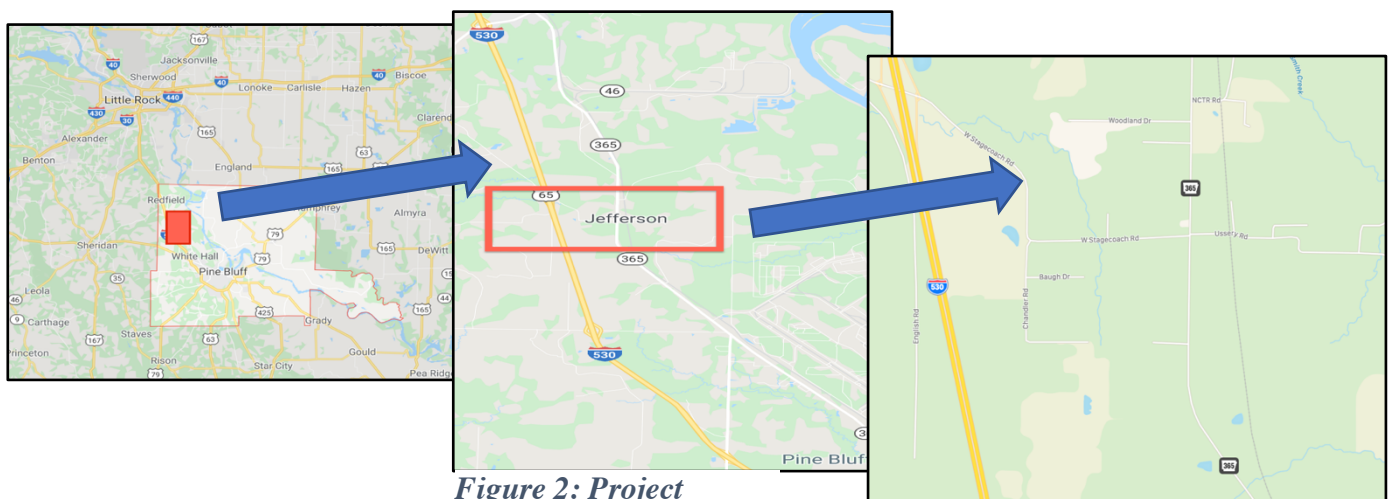
***Table 1: Weight of Freight on I-530 Connectors***

In looking at current traffic flows, it appears that much of the industrial traffic is being routed through Redfield. The Gravel Pit Road and Stagecoach Road exits have a reduced amount of traffic due to the poor condition of the roads. The daily ESALS information indicates the traffic is primarily personal vehicles. Because of the poor condition of Stagecoach Road, the condition is magnified with industrial traffic avoiding this route.

Highway 104 primarily handles traffic flow to the U.S. Army's Pine Bluff Arsenal. Traffic heading further north, towards the current location of NCTR and the future location of the Jefferson Springs Industrial Park, appears to avoid this route, likely because it requires a left turn onto a busy portion of Hwy 365. The proposed Jefferson Corridor Project would improve access to the industrial area for both personal vehicles and industrial vehicles by upgrading the connections between I-530 at exit 24 and exit 27 and Hwy 365. Existing connections will not be eliminated.

A traffic study prepared to estimate the impact of the most immediate planned industrial project, the gas-to-liquids facility on a site east of Hwy 365 that is fully permitted, estimates that construction for the first phase (first of five planned phases) will add approximately 4,000 vehicles daily to connectors that currently carry fewer than 2,000 vehicles daily and were not designed or constructed for industrial vehicle traffic.

The Jefferson Corridor Project would provide an upgraded connector roadway between I-530 and Hwy 365 to allow for construction and ongoing operation of a planned \$3.5 billion investment into an area that has been designated as a Qualified Opportunity Zone, as well as allow for a more direct routing of industrial traffic currently taking a circuitous route to reach the large employers (including several aforementioned federal employers) in this dense industrial corridor.



***Figure 2: Project***

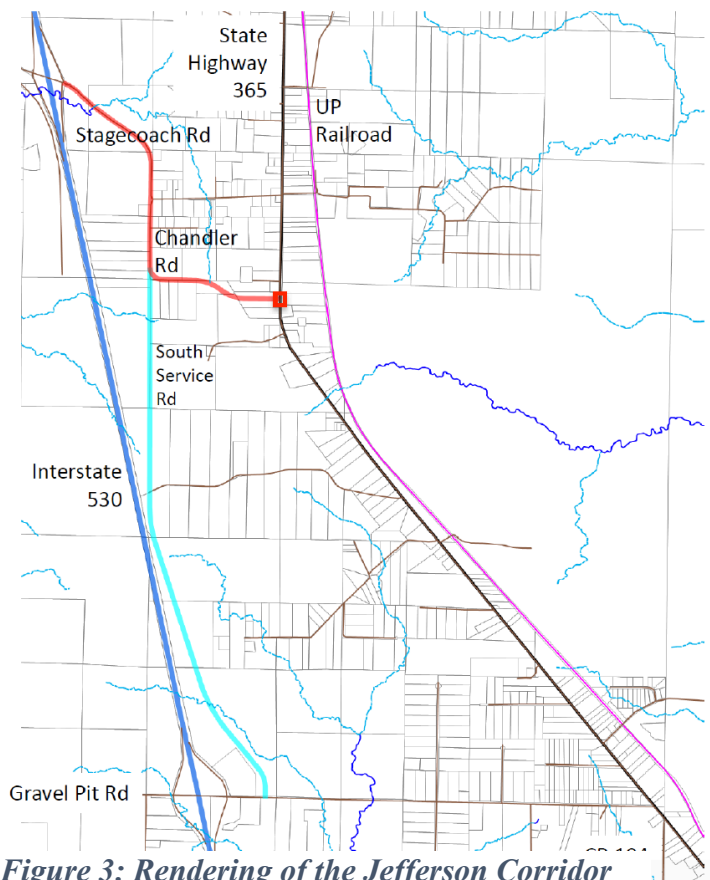


## Project Location

The proposed location for the project is the community of Jefferson Springs, in Jefferson County, Arkansas. It is located off I-530 between Exit 24, Stagecoach Road and Exit 27, Gravel Pit Road. (See Figure 3)

As stated in detail above currently heavy truck traffic headed to the industrial area east of 365 has a few poor quality options to get from the I-530 to the industrial area east of Hwy 365. Each presents its own set of challenges. The Jefferson Corridor Project would endeavor to make Exit 24, Stagecoach Road the primary connector between I-530 and Hwy 365 by widening and upgrading portions of Stagecoach Road and Chandler Road and creating an elevated crossing over Hwy 365 that will lead to the entrance of Jefferson Springs Industrial Park that will be the site of the GTL Americas gas-to-liquids facility.

The proposed roadway would provide a connector for Hwy 365 to I-530 at Exit 24, (Stagecoach Road) and Exit 27 (Gravel Pit Road). In addition to a new service road between those two exits beginning at Exit 24 (red line) and continuing south (turquoise line) to Exit 27, the project would include a connector roadway off Stagecoach Road going southeast (red line) to state highway 365 where Hwy 365 would be traversed with an elevated diamond interchange and return to grade (See Figure 3 above).



**Figure 3: Rendering of the Jefferson Corridor Project's Proposed Roadway**

Currently Exit 24 at Stagecoach Road is not suited for heavy truck traffic. (See Figure 4) The project would remedy this by reinforcing and upgrading the section of Stagecoach Road from I-530 to Chandler Road .

Chandler Road is currently a dirt road south of Stagecoach Road primarily used by landowners to access property in the area. (See Figure 5)

The proposed project would follow the current route laid out by Chandler Road splitting into a south section and north section as Chandler Road turns east.

The South section would be composed of an entirely new access road that would continue south for approximately two (2) miles before tying back into Gravel Pit Road just east of its intersection with I-530. The north section would follow Chandler Road as it

turns east before coming to a dead end. The proposed project would extend Chandler Road slightly to the south east before crossing over Hwy 365 and returning to grade.



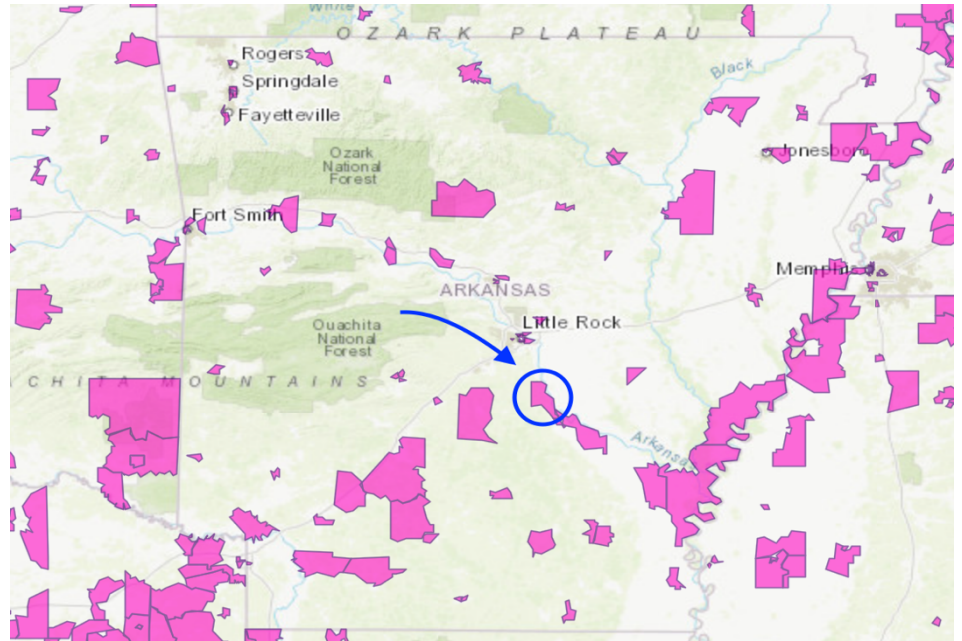
*Figure 4: Stagecoach Road*



*Figure 5: Chandler Road*

## Qualified Opportunity Zone

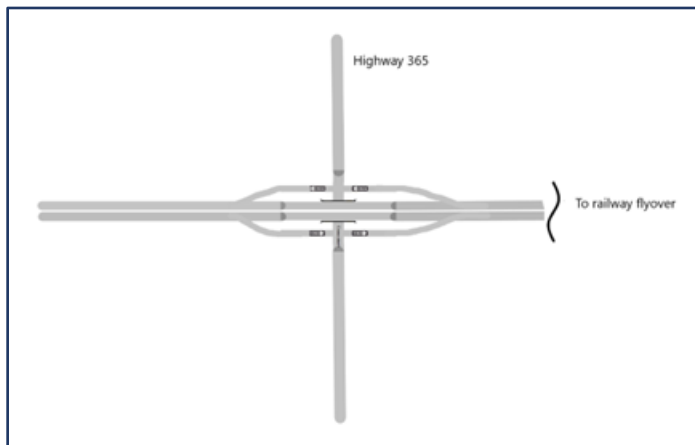
The roadway proposed in the Jefferson Corridor Project will be located in a Qualified Opportunity Zone. (See Figure 6, this page) Jefferson County has developed an excellent site for large industrial projects. With access to rail, the navigable Arkansas River, and within 4 miles of I-530, the Jefferson Springs Industrial Park is well-suited to attract industrial development projects to northern Jefferson County. The one very important missing piece is a safe, modern, efficient connector between the industrial development park and I-530. The award of this BUILD Grant would allow Jefferson County to build a modern roadway that would finalize and confirm the investment of the gas-to-liquids mega-project with GTL Americas LP and draw other affiliated and feeder projects to this otherwise perfectly-suited location.



*Figure 6: Opportunity Zones*

## Project Scope

The primary connection (northern portion) and service road route (southern portion) will be upgraded to the level of a ‘two-lane artery.’ The project will include an upgrade and widening of Stagecoach Road from the intersection with I-530, Exit 24, to the point Stagecoach Road intersects Chandler Road. Chandler Road will also be widened, improved, and extended to the intersection with Hwy 365. The intersection at Hwy 365 will be developed as an elevated



diamond interchange to accommodate a surface intersection as well as an overpass (See Figure 7). A second connection to I-530 will be provided by establishing a southern segment that extends south from Chandler Road to Gravel Pit Road near I-530, Exit 27. (See Figure 3, above)

*Figure 7: Diamond Interchange*

## Sources and Uses of Funds

Total project cost is estimated at 19,780,800.

### Uses of Funds

*Table 2: Use of Funds*

	North Segments	Unit Type	Qty.	Unit Cost	Cost	Scope of Work
1.1	Stagecoach Road from I-530 intersection south to the intersection with Chandler Road	Linear Foot	3120	\$600	\$1,872,000	Widen Stagecoach Road to become 2-lane artery
1.2	Chandler Road south from the intersection with Stagecoach Road to the Chandler Road termination	Linear Foot	3170	\$600	\$1,902,000	Widen Chandler Road to become 2-lane artery
1.3	New Roadway from the Chandler Road Termination east to Hwy 365	Linear Foot	1200	\$600	\$720,000	Install new roadway as 2-lane artery
1.4	Required Right of Way or Land Acquisition (anticipated)	Batch	1	\$1,400,000	\$1,400,000	
1.5	Permitting (anticipated)	Batch	1	\$50,000	\$50,000	
1.6	Contingencies	Percentage	20%		\$1,188,800	
S1	Subtotal				\$7,132,800	

	Diamond Intersection at Hwy 365					
2.1	Overpass Deck	Square Foot	6125	\$160	\$980,000	Overpass deck to cross Hwy. 365
2.2	West Side Ramp with Surface Entrance and Exit Lanes	Linear Foot	600	\$1,200	\$720,000	Surface entrance and

						exit to Hwy 365
2.3	East Side Ramp with Surface Entrance and Exit Lanes	Linear Foot	600	\$1,200	\$720,000	Surface entrance and exit to Hwy. 365
2.4	Upgrade to Hwy 365	Batch	1	\$270,000	\$270,000	Turning lanes
2.5	Required Right of Way or Land Acquisition (anticipated)	Batch	1	\$250,000	\$250,000	
2.6	Permitting (anticipated)	Batch	1	\$50,000	\$50,000	
2.7	Contingencies 20%	Percentage	20%		\$598,000	
S2	Subtotal				\$3,588,000	

	<b>South Segment</b>					
3.1	New Roadway south from Chandler Road to Gravel Pit Road	Linear Foot	1100	\$600	\$6,600,000	Install new roadway as 2-lane artery
3.2	Required Right of Way or Land Acquisition (anticipated)	Batch	1	\$700,000	\$700,000	
3.3	Permitting (anticipated)	Batch	1	\$250,000	\$250,000	
3.4	Contingencies 20%	Percentage	20%		\$1,510,000	
S3	Subtotal				\$9,060,000	
	Total Cost				\$19,780,800	

## Source of Funding

Arkansas Department of Transportation\* \$5,000,000

*\*Federal funds previously set aside for this project*

These funds are targeted for the planning and construction of segments that connect to State Hwy 365. Included are engineering, ROW acquisition, Permitting, and 60 % of the cost of construction of the Hwy 365 intersection.

BUILD Grant Funds \$14,780,800



## Operational/Maintenance funding for the Jefferson Corridor Project

Operational and maintenance funding for the project will be minimal during the project's initial life cycle. A portion of the projected increase in property and sales tax revenue resulting from the development of the Jefferson Springs Industrial Park will be used to fund any needed operation and maintenance on the Jefferson Corridor Project (See attached economic impact study in **Appendix B**, and excerpted portion in the economic competitiveness section of the application).

## Primary Selection Criteria

### Safety

The need to provide a safe, modern and efficient transportation system for commercial and residential travelers is the primary driver of this project. With the coming needs of Jefferson Springs Industrial Park, traffic is congested and dangerous on the county road connections to I-530. Relieving the congestion will also minimize the routing of freight to alternative connections. With the additional expected development at the Jefferson Springs Industrial Park, an estimated 4,000 trucks a day, during peak construction, will be exiting directly onto Hwy 365 resulting in unsafe conditions for those living or working in the area and for other citizens of Jefferson County traveling those roads.

Currently the primary route into Jefferson Springs Industrial Park is Stagecoach Road, a two-lane



**Figure 8: Stagecoach Road**

road with a minimal gravel shoulder in parts and no shoulder at all in others. Stagecoach Road traverses a rural area and is lined with traditional small homes and manufactured homes. (See Figure 8, here) The volume of traffic anticipated during the three-year construction period of the GTL Americas gas-to liquid facility and later when the facility is operational is unsustainable from a safety and road maintenance perspective.

The 200 block of Stagecoach Road is an especially unsafe area (see Figure 9, below). Residences and fields with cattle closely line the road. Routing truck traffic through this area would create unnecessary safety concerns and inefficiencies. It would also lead to high levels of noise pollution and potentially disturb any livestock present.

The intersection of Hwy 365 and Stagecoach Road is a major concern with the current route. A traffic count, just south of the intersection, completed by the Arkansas Department of Transportation (ARDOT) in 2019 revealed an average daily traffic (ADT) count of 2,700. If trucks and other heavy equipment enter from Stagecoach Road, it would be necessary for them to turn back onto Hwy 365 to access the industrial park (See Figure 10, below).



*Figure 9: Stagecoach 200 Block*



*Figure 10: Stagecoach and Hwy 365*

The intersection, with 2,000 to 4,000 additional heavy trucks per day, would be at risk for an increase in accidents (and fatalities) in the area. Trucks traveling from I-530 to the industrial area, with hazardous or otherwise dangerous materials, would be forced to use this route. The proposed roadway would eliminate industrial traffic from the intersection and dramatically decrease the current unsafe conditions.

The proposed new roadway would increase safety with an alternative route to bypass the 200 block of Stagecoach Road. The proposed roadway would incorporate northern Stagecoach Road and Chandler Road creating a wider two-lane artery to handle heavy truck traffic. The proposed roadway would also avoid the major potential issues at the intersection with Hwy 365 by bringing traffic above grade over Hwy 365.

Heavy industrial traffic frequently travels a route to the north of the proposed new roadway, taking Exit 20, Sheridan Road at Redfield, Arkansas. While the road in this area is in better shape from a maintenance standpoint, there are safety concerns. Redfield is a small rural town of 1,200 between Little Rock and Pine Bluff. Traffic using Exit 20, Sheridan Road, travels through the center of this small-town exposing residents to potential safety issues. (See Figure 12, below) Industrial traffic encounters inefficient delays due to local residential and business traffic related to a bank, church, multiple retail stores, a gas station, and a liquor store.



*Figure 11: Sheridan Road Businesses*

After passing through the town of Redfield, truck traffic would travel for approximately four (4) miles down Hwy 365 before reaching the entrance for NCTR or the Jefferson Springs Industrial Park. Hwy 365 is two-lane road with no turning lane and very little shoulder in this section of road. After leaving Redfield, traffic passes through the community of Kearny and trucks headed to the industrial park must make a left-hand turn from Hwy 365 back into the entrance of the Jefferson Springs Industrial Park.

## State of Good Repair

The proposed roadway is planned to dramatically improve the section of Stagecoach Road that is used as an I-530 and Hwy 365 connector. The proposal plans to widen Chandler Road and upgrade it from a dirt surface to a surfaced two-lane arterial capable of handling heavy truck traffic.

The proposed roadway will also reduce the increased heavy traffic on Sheridan Road which traverses Redfield. This heavy traffic (281 Daily ESALs), is likely causing significant degradation on Sheridan road, possibly resulting in increased need for maintenance. The Jefferson Corridor Project will be specifically designed to re-route and handle the heavy truck traffic currently depreciating Sheridan Road.

The proposed roadway will also reroute some the industrial traffic from the southern two connectors that were designed and built for the use of personal vehicles, but are currently being used as routes for heavy traffic from I-530 to Hwy 365. While Hwy 104 currently handles the bulk of the current traffic and is best-suited of the three routes to handle the heavy truck traffic, it is not designed as a safe, modern and efficient roadway suitable to handle the additional industrial traffic that will result from the planned mega-project at Jefferson Springs Industrial Park. This route is used by industrial and business travelers going to Jefferson Springs Industrial Park and the Pine Bluff Arsenal. Additional traffic on this road would create safety and efficiency issues for the largest employers in Jefferson County, including the federal government employers with facilities in that area.



## Economic Competitiveness

The Jefferson Corridor Project will provide improved access to the Jefferson Springs Industrial Park and assist Jefferson County in the pursuit and retention of major business, industry and employers. This access will allow Jefferson County to recruit and retain major industrial projects such as GTL Americas LP, the gas-to-liquids project planned for this area. The industrial area east of Hwy 365 is already home to several high employment facilities. Allowing for the efficient transportation of good and materials into these existing facilities will increase the productivity and competitiveness of these facilities including the FDA National Center for Toxicological Research and the US Army Pine Bluff Arsenal, Tyson Foods, and the White Bluff power plant.

The Jefferson Corridor Project's proposed roadway will be the only reliable route between those businesses and I-530. The modern, safe roadway will increase efficiency and decrease the costs associated with transporting goods and people. The roadway is the key piece in unlocking the potential of the otherwise ideal industrial park site in northern Jefferson County. With this award and the completed construction of the proposed roadway, phase I construction can begin on GTL Americas LP project that will convert natural gas to clean diesel. This will be the first facility of its kind in North America. The innovative technology has been used in facilities around the world. It will be a first for Jefferson County, Arkansas, the nation and this continent. It has the potential to provide citizens of Jefferson County with opportunities for employment not thought possible for the people of this area. It will raise property and sales tax revenues for local and state government. The Arkansas Economic Development Commission has designated Jefferson County as a Tier 4 County indicating that it is among the 'least prosperous counties.' This first phase (in a plan that includes five phases) will bring approximately 2,500 construction and trade jobs to Jefferson County over a three-year period and 250 full-time jobs at competitive salaries when phase I is operational.

An economic impact study (See **Appendix B**) performed for GTL Americas LP by Economic Modeling Specialist International (EMSI) suggested that construction would result in an increase of \$207 million to the Gross Regional Production of the Pine Bluff Metro Statistical Area (MSA) in the short term with an additional \$100 million increase to the Gross Regional Product annually during operation of the plant (See Table 3)

**Table 3: Economic Impact Pine Bluff MSA**

**TABLE 1: Detailed Economic Impact Results for the Pine Bluff MSA**

	-----Short-term (construction)-----				-----Long-term (operations) -----			
	Output (\$M)	Jobs	Earnings (\$M)	Value Added (GRP)(\$M)	Output (\$M)	Jobs	Earnings (\$M)	Value Added (GRP)(\$M)
<b>Pine Bluff MSA</b>	<b>\$395</b>	<b>2,430</b>	<b>\$183</b>	<b>\$207</b>	<b>\$481</b>	<b>350</b>	<b>\$19</b>	<b>\$100</b>
Direct	\$351	1,860	\$166	\$179	\$462*	110*	\$11*	\$88*
Indirect	\$21	230	\$7	\$13	\$5	40	\$2	\$3
Induced	\$23	340	\$10	\$15	\$14	200	\$6	\$9

Source: EMSI, Social Accounting Matrix, 2014Q2

The GTL Americas project would be a boon not only to Jefferson County but also to Arkansas' overall economy. The study estimated that the Pine Bluff MSA did not have the capacity to staff the entire project and that a significant portion would reside outside the MSA. Accordingly, the benefit would extend to the entire state of Arkansas. (See Table 4)

**Table 4: Economic Impact Arkansas**

**TABLE 2: Detailed Economic Impact Results for Arkansas**

	-----Short-term (construction)-----				-----Long-term (operations) -----			
	Output (\$M)	Jobs	Earnings (\$M)	Value Added (GRP)(\$M)	Output (\$M)	Jobs	Earnings (\$M)	Value Added (GRP)(\$M)
<b>Arkansas</b>	<b>\$753</b>	<b>5,250</b>	<b>\$333</b>	<b>\$406</b>	<b>\$1,127</b>	<b>1,370</b>	<b>\$72</b>	<b>\$276</b>
Direct	\$520	2,750	\$246	\$266	\$924	230	\$22	\$176
Indirect	\$88	730	\$28	\$50	\$137	350	\$23	\$59
Induced	\$145	1,770	\$59	\$90	\$66	790	\$28	\$42

Source: EMSI, Social Accounting Matrix, 2014Q2

Additionally, the Jefferson Corridor Project's proposed roadway would connect industry and public facilities located in Northern Jefferson County directly into the future High Priority Corridor 18: NAFTA Superhighway, resulting in an efficient and reliable tie-in to a major transportation network. The proposed extension of I-530 from Pine Bluff south to Monticello (Interstate 69) is part of High Priority Corridor 18: NAFTA Superhighway (Section (18)(C)(ii)).

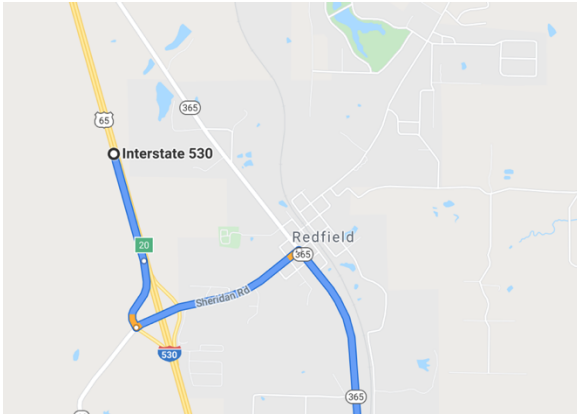
## Environmental Sustainability

The Jefferson Corridor Project will reduce emissions by cutting travel time and reducing fuel consumption for heavy truck traffic entering the Jefferson Corridor Industrial Area. It will also contribute to environmental sustainability by supporting the development of the first tenant in the Jefferson Springs Industrial Park. As discussed elsewhere in this application Jefferson County is partnering with GTLA to bring a gas-to-liquids plant to the area. The paraffinic diesel produced at this plant will significantly lower tail pipe emissions in vehicles using the fuel. Paraffinic fuels can directly replace conventional diesel fuels without the need for modifications to engines or infrastructure. Briefly, paraffinic fuels reduce the emissions of regulated pollutants, including Nitrogen Oxides (NOx), Particulate Matter (PM), Carbon Monoxide (CO), and unburnt hydrocarbons (HC's). They can reduce the noise levels in some engines thanks to a more uniform combustion. They are classified as non-toxic, odorless, readily-biodegradable and have a low-hazard rating because all molecules are paraffinic ( See complete study on paraffinic diesel in **Appendix B**).



## Quality of Life

Currently and increasingly, as the development of the Jefferson Springs Industrial Park proceeds, truck traffic is routed directly through the center of the small town of Redfield or south through



**Figure 12: Sheridan Road Route**

northern part of the town of Whitehall. Re-routing truck and other industrial traffic through the proposed roadway will increase the quality of life for citizens of both communities. Noise pollution, congestion and other issues caused by heavy truck traffic in the area will be remedied.

Particularly, the rural community of Redfield, already sees an inordinate amount of heavy traffic through the center of their small town daily – approximately 281 ESALs daily (See Table 1). Construction in the Jefferson Springs Industrial Park will only increase this issue exponentially. The current most manageable route from I-530 to Hwy 365 would take trucks straight through the

center of Redfield (See Figure 13). Rerouting that traffic through the roadway proposed in the Jefferson Corridor Project would have significant quality of life benefits for the community.

As discussed in detail above, the new route will improve transportation for Jefferson County residents living or employed in this area and give other residents of Jefferson County and the surrounding area increased access to good jobs.

## Secondary Selection Criteria

### Jefferson County- GTLA Partnership

The County is partnering with GTL Americas, LP. to bring the Jefferson Springs Industrial Park to life. Jefferson County has robust geographical advantages that provide quick access to the international marketplace. It offers access to the Arkansas River, proximity to high voltage lines, interstate gas and product pipelines, access to a major railroad, a terrain with few streams or wetlands issues, and proximity to a major interstate highway. As a result, Jefferson County was selected as the top location to build and operate a \$3.5 billion industrial gas-to-liquids (GTL) processing facility - a project that will provide a much-needed economic boon to the county and surrounding area. As of the [2010 census](#), 77,435 people lived in the county. However, between 2000 and 2010 the county experienced population decline of 8.1%. Since 2010, the census estimates an additional 13.7% decrease in population to 66,824 (2019). GTL Americas, LP. will bring with it the largest economic development investment in Arkansas state history and this transformative project promises to be a catalyst needed to help the region redefine itself in an increasingly globalizing economy.

The multi-billion-dollar GTL ‘super project’ will be the first large-scale GTL processing plant of its kind in the U.S., located on approximately 1,000 acres near the Pine Bluff Arsenal. The project is a planned processing and refining facility that would turn low-cost natural gas into premium quality petroleum products such as paraffinic diesel, gasoline and jet fuel. The GTL facility will produce approximately 41,600 barrels per day (bbl/d) of diesel and naphtha. Once completed, the project will be the first full-scale GTL refinery in the U.S., meaning that it would be capable of producing the cleanest fuels available.

Improvements to area roads and infrastructure that support the successful completion of this project will create bridges of opportunity that bolster economic growth and stability. Median income for a household in Jefferson county is \$38,289. Over 22% of Jefferson County residents live in poverty. The GTL project calls for the creation of 250 new, permanent full-time positions with an average wage of \$40 per hour while the construction period is anticipated to create or support more than 5,000 jobs within the state and would add \$333 million in annual labor income statewide, according to an economic impact analysis performed by EMSI, a recognized leader in labor market data and regional economic analysis.

Jefferson County also offers a welcoming business community whose citizens are committed to transforming its recent past into a vibrant and economically diverse destination that attracts new industry and professionals. Voters approved a county 3/8-cent sales tax in 2011 for economic development which is administered by the Economic Development Corporation of Jefferson County (EDCJC). This organization, along with elected officials and The Alliance of Jefferson County, have been coordinating support for the GTL project since discussions began in 2013. The project qualified for incentives under the approved tax that assisted with its selection as the nation’s ideal location. Investments in Jefferson County are welcomed by an organized and integrated collaborative of stakeholders from a broad array of sectors.

## Environmental Risk

The Environmental risk on this project is low. This is a conventional road project that entails six small stream crossings and zero wetlands impacts. Accordingly, it is our understanding that the Project will be permitted under the Nationwide Permit 14, a general permit for linear transportation projects. We therefore expect that no Environmental Assessment or Environmental Impact Statement will be required for this project per regulations set forth in the National Environmental Policy Act (NEPA), and that there is no schedule risk associated with NEPA compliance.

## Project Schedule

**START DATE:** 5/30/19

ACTIVITY	START	END	NOTES
Define Project Objectives	5/30/19	9/30/19	A traffic study was commissioned to define current traffic loads and anticipated traffic loads based on continued development of the Jefferson Corridor.
Preliminary Engineering	10/1/19	2/1/20	A Preliminary engineering study was undertaken to identify potential options for traffic flows and propose cost effective routes.
Prepare and Submit BUILD Grant Application	2/1/20	5/18/20	The BUILD Grant is prepared utilizing Jefferson County, Arkansas Department of Transportation and potential Jefferson Springs Industrial Park occupants.
Evaluation by DOT and Selection of BUILD Grant Recipients	5/18/20	9/30/20	Period of Evaluation by the Department of Transportation.
Streams & Wetland Survey of Selected Route	7/1/20	9/30/20	Based on a preliminary overview, the expected impact on streams and wetlands is minimal. A detailed survey is required for an official evaluation.
Right of Way Acquisitions	6/1/20	12/1/20	Preliminary evaluations of required Rights of Way were conducted during preliminary engineering.
Acquire Permit Through USACE Under Nationwide Permit (NWP) 14	1/1/21	7/1/21	The Nationwide Permit 14 permitting cycle with the USACE is anticipated to be 3 months to 6 months. The line item is budgeted at 6 months to avoid any timing risk.
Finalize BUILD Grant Funding by Demonstrating Obligation	4/1/21	7/1/21	The deadline for demonstrating obligations and completing all DOT requirements is September 2022. The preliminary work to date indicates that we will be in full compliance 15 months earlier.
Detail Engineering	1/1/21	5/1/21	Detailed engineering will be conducted via a selected local firm with Arkansas experience.
Bidding of Construction Contracts	5/1/21	7/1/21	Construction contracts will be awarded based on competitive bidding amongst qualified firms.
Construction of Northern Segments and the Intersection with Hwy365	7/1/21	1/1/22	To maximize the project benefit and minimize any construction conflicts with other area business expansions, the target is to complete the northern segment before work begins on the southern segment.

Construction of Southern Segment Connecting Gravel Pit Road	2/1/22	8/1/22	Construction will commence on the southern segment immediately after the northern segment is fully operational.
Project End	8/1/22		

## Benefit Cost Analysis

The attached Benefit- Cost Analysis (**Appendix D**) is primarily a qualitative analysis, applicant attempted to quantify benefits where data was available. Jefferson County is convinced this project will provide a significant benefit to Jefferson County, the surrounding area, and more broadly the benefits outweigh the costs when considering them using a holistic approach.

Primary benefits of this project include:

The primary benefits of this project include:

1. Increased safety for the citizens of Jefferson County and the surrounding area
2. Economic benefits for existing and future business in Jefferson County.
3. Economic benefits for the citizens of Jefferson county
4. A reduction in noise pollution, particularly for the community of Redfield.
5. A reduction in current and projected emissions
6. Reduced operation and maintenance costs for state highways and county roads for the Arkansas Department of Transportation and Jefferson County.

Briefly, this project would be a safe and reliable connector for industry located in northern Jefferson County, through which those businesses could connect to the larger nationwide transportation network. This project would help redirect industrial traffic from small rural communities to an appropriate, designed-for-purpose connector increasing quality of life while also reducing travel time and fuel consumption.

The portion that applicant was able to quantify, time and operational cost savings to tenants of Jefferson Springs Industrial Park were significant. As a baseline applicant took the traffic study conducted by Peters & Associates (See Traffic Study in **Appendix B**) and assumed that traffic headed to Jefferson Springs Industrial Park would be routed through Sheridan Road due to road condition and location of other available routes. Additionally, applicant made reasonable assumptions about traffic speed and traffic origination. When compared to baseline assumptions traffic time and maintenance saving were significant even when only considering projected traffic for the Jefferson Springs Industrial Park. We believe that when factoring the savings for traffic headed to other industrial sites in the area, primarily NCTR, the economic impact benefit alone would be robust.

Apart from the quantified economic benefit, if data were available to quantify the emission benefits, safety benefits and quality of life benefits the benefits would far exceed the costs of the project.

Tertiary benefits of this project include:

1. Supporting the nation's first gas-to-liquids plant to manufacture clean diesel from natural gas.
2. Job creation and economic impact for the residents of Jefferson County and the surrounding area.

## Index of Supporting Information on Website

The primary web address for the Jefferson Corridor Project is:

<https://www.jeffersoncountyar.gov/JeffersonCorridor>

The appendices to this application narrative are located on the website as follows:

**Appendix A:** Commitment/Support Letters

**Appendix B:** Supporting Studies

**Appendix C:** Cost Estimates

**Appendix D:** Detailed Benefit-Cost Analysis

**Appendix E:** Schedule